

LITTLE COLORADO RIVER BASIN

09394500 LITTLE COLORADO RIVER AT WOODRUFF, AZ

LOCATION--Lat 34°46'58", long 110°02'37", in NE_{1/4}SW_{1/4} sec. 17, T.16 N., R.22 E., Navajo County, Hydrologic Unit 15020002, on left bank at abandoned county road bridge in Woodruff, 3.7 mi downstream from Silver Creek.

DRAINAGE AREA--8,072 mi², of which 297 mi² is noncontributing.

PERIOD OF RECORD--Mar. to May 1905; June to July 1905 (gage heights only); Aug. 1905 to May 1907; July 1907 to Apr. 1908, July to Oct. 1908, Dec. 1908, and Dec. 1915 to Sept. 1916 (gage heights only); Oct. 1916 to Aug. 1917 (monthly discharge only); Sept. 1917 to Mar. 1918, Dec. 1918 to Dec. 1919, Apr. 1929 to Dec. 1933, Sept. 1935 to current year. Published as "near Woodruff" 1916-19, 1929-48.

REVISED RECORDS--WSP 1049: 1917. WSP 1213: 1906, 1919(M). WDR AZ-88-1: Drainage area.

GAGE--Water-stage recorder. Datum of gage is 5,130.3 ft above sea level. See WSP 1733 for history of changes prior to Sept. 22, 1949.

REMARKS--Records good except for estimated daily discharges, which are poor. Diversions above station for irrigation of about 22,000 acres, including a pump installation 1,000 ft upstream installed in spring of 1973. Some regulation by reservoirs above station; combined capacity, about 81,400 acre-ft.

EXTREMES FOR PERIOD OF RECORD--Maximum discharge not determined, occurred Jan. 19, 1916; maximum discharge recorded, 25,000 ft³/s Dec. 5, 1919; maximum gage height, 22.9 ft from highwater mark in gage well, Dec. 19, 1978; minimum, no flow at times in most years prior to 1960, 1974, 1976, 1983, and post 1999.

EXTREMES FOR CURRENT YEAR--Peak discharges greater than base discharge of 1,900 ft³/s and (or) maximum (*):

	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
	Feb. 12	2130	1,930	12.15
	Feb. 20	0515	*2,260	*12.78

Minimum daily discharge, no flow for many days.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	20	6.7	2.0	97	17	44	7.6	3.7	1.1	0.11	2.2	2.5
2	14	3.9	2.0	43	14	24	e6.2	3.2	0.86	0.03	11	39
3	8.2	3.2	1.6	23	16	18	e5.7	2.8	0.61	0.01	12	231
4	5.7	3.0	1.5	621	17	13	e5.5	1.8	0.35	0.01	33	218
5	4.6	3.1	1.5	562	12	11	e3.5	1.6	0.22	0.01	16	120
6	e3.4	3.2	1.6	198	7.7	25	1.8	1.4	0.58	0.00	12	e38
7	5.2	2.9	1.9	e107	5.1	132	0.71	1.4	0.37	0.00	117	e19
8	5.0	2.0	2.0	67	3.9	148	0.98	2.2	0.12	0.00	74	11
9	7.1	1.2	2.0	49	3.2	88	1.2	2.2	0.00	0.00	155	15
10	13	1.2	2.6	32	2.9	41	1.0	1.9	0.09	0.00	133	11
11	8.4	1.2	2.4	110	3.9	23	1.6	0.94	0.27	0.00	212	7.4
12	7.9	1.2	2.0	163	850	19	1.9	2.0	0.52	0.00	460	11
13	6.2	5.4	1.8	120	682	18	1.1	2.0	0.77	0.00	e129	5.5
14	4.0	3.8	1.5	64	184	57	0.95	1.6	0.71	0.00	e75	8.4
15	10	3.0	1.5	31	90	32	1.2	1.6	0.29	0.00	e102	7.6
16	11	2.7	1.6	20	50	19	1.8	1.3	0.28	0.00	31	8.1
17	6.6	2.7	2.5	e15	31	12	2.0	1.1	0.03	0.00	32	4.1
18	2.2	2.8	2.7	e12	29	6.7	2.4	0.74	0.00	0.00	31	3.2
19	2.1	3.0	2.8	e9.3	552	4.3	2.4	0.77	0.00	0.00	16	3.0
20	1.9	2.8	2.6	e5.8	1330	3.6	0.95	0.47	0.00	0.00	17	3.5
21	1.3	2.4	2.0	e4.2	477	3.5	1.3	0.66	0.00	0.00	17	4.2
22	1.1	2.2	2.3	3.8	230	3.3	2.1	0.91	0.00	32	17	4.2
23	2.2	3.6	2.7	3.8	475	3.2	2.5	1.1	0.25	11	119	2.6
24	2.2	3.3	2.0	5.0	273	2.8	9.0	0.74	0.70	17	e50	1.7
25	1.6	7.7	1.9	5.2	e200	2.8	3.0	0.09	0.32	26	e17	4.1
26	2.1	4.7	1.6	5.2	e145	73	2.8	0.05	0.40	21	13	4.3
27	1.9	3.0	1.5	4.4	e118	44	2.2	0.27	0.51	6.8	9.8	4.7
28	51	2.3	1.5	3.6	e89	19	3.0	0.13	0.51	8.1	5.4	4.3
29	161	2.2	1.6	20	---	19	3.4	0.56	0.48	9.1	2.5	1.8
30	19	2.1	525	24	---	19	5.4	2.6	0.29	2.9	2.1	2.3
31	11	---	292	19	---	12	---	2.3	---	2.5	2.4	---
TOTAL	400.9	92.5	874.2	2447.3	5907.7	940.2	85.19	44.13	10.63	136.57	1925.4	800.5
MEAN	12.9	3.08	28.2	78.9	211	30.3	2.84	1.42	0.35	4.41	62.1	26.7
MAX	161	7.7	525	621	1330	148	9.0	3.7	1.1	32	460	231
MIN	1.1	1.2	1.5	3.6	2.9	2.8	0.71	0.05	0.00	0.00	2.1	1.7
MED	5.7	3.0	2.0	23	69	19	2.2	1.4	0.31	0.00	17	5.1
AC-FT	795	183	1730	4850	11720	1860	169	88	21	271	3820	1590
CFSM	0.00	0.00	0.01	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1905 - 2005, BY WATER YEAR (WY)

(WY)	MEAN	37.5	22.8	32.6	40.1	57.5	72.6	52.4	19.8	6.02	68.9	137	88.2
1973	MAX	301	543	382	599	827	610	789	488	87.8	810	951	630
1906	MIN	1.05	0.90	1.24	1.12	0.91	0.86	0.00	0.00	0.00	0.53	3.57	0.71
1920	(WY)	1951	2000	2000	2000	2000	2000	2000	1956	1929	1929	1942	1950
1993													1956
1932													

SUMMARY STATISTICS FOR 2004 CALENDAR YEAR FOR 2005 WATER YEAR WATER YEARS 1905 - 2005

ANNUAL TOTAL	4698.25	13665.22	
ANNUAL MEAN	12.8	37.4	47.7
HIGHEST ANNUAL MEAN			161
LOWEST ANNUAL MEAN			4.36
HIGHEST DAILY MEAN	847	Jul 15	2000
LOWEST DAILY MEAN	0.00	May 4	1905
ANNUAL SEVEN-DAY MINIMUM	0.00	Jun 9	1919
MAXIMUM PEAK STAGE			22.90
ANNUAL RUNOFF (AC-FT)	9320	27100	Dec 19 1978
ANNUAL RUNOFF (CFSM)	0.002	0.005	34570
10 PERCENT EXCEEDS	9.5	93	87
50 PERCENT EXCEEDS	1.9	3.3	6.4
90 PERCENT EXCEEDS	0.00	0.27	0.90

e Estimated